Data Sheet

RoHS 2002/95/EC

microphone 50GG31

3500 - 3101077
Version:1 01-JUN-2011

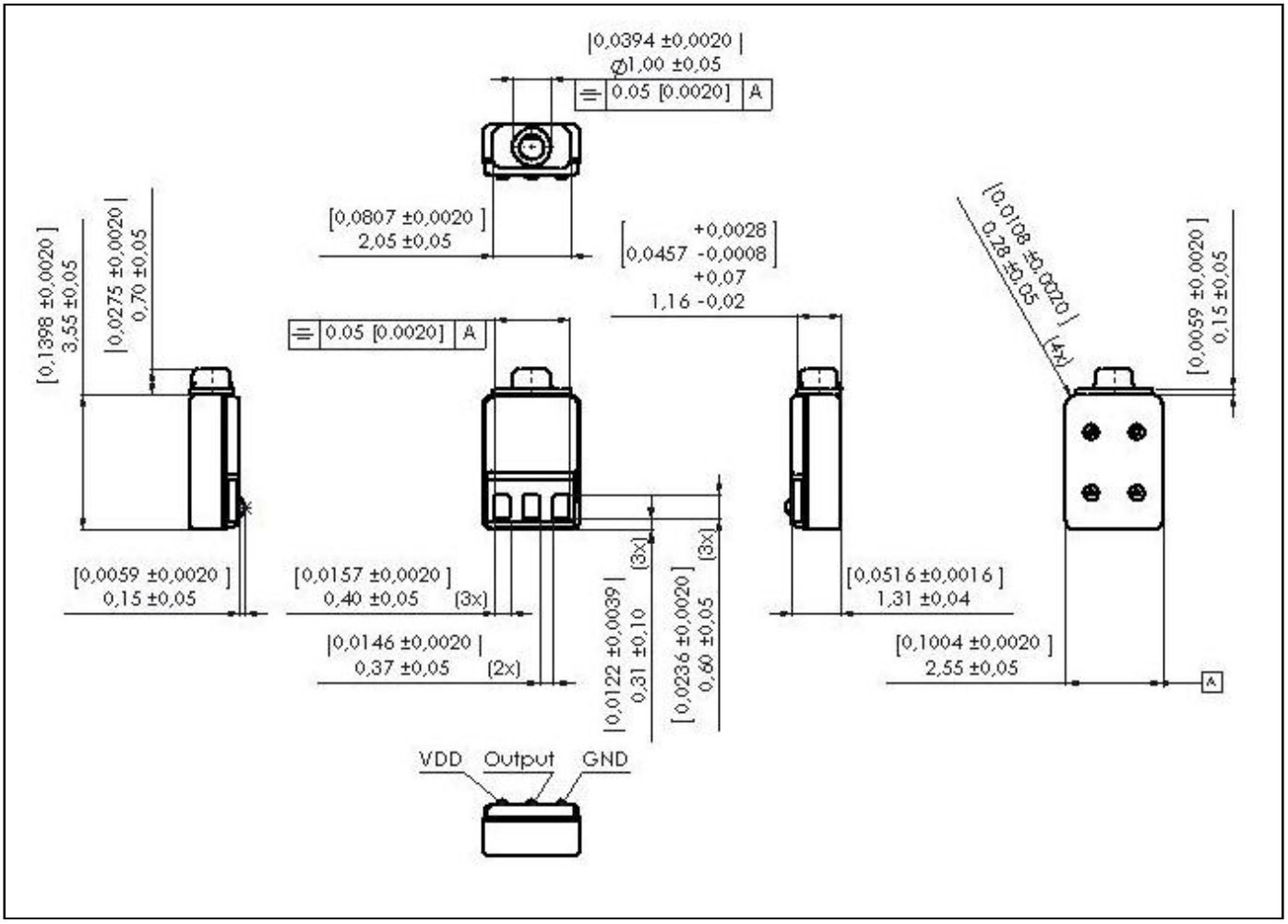
Description

Rectangular miniature electret condenser microphone for hearing instruments.

Features

- Reduced size
- Rectangular shape

Product drawing - Dimensions in mm (inch)



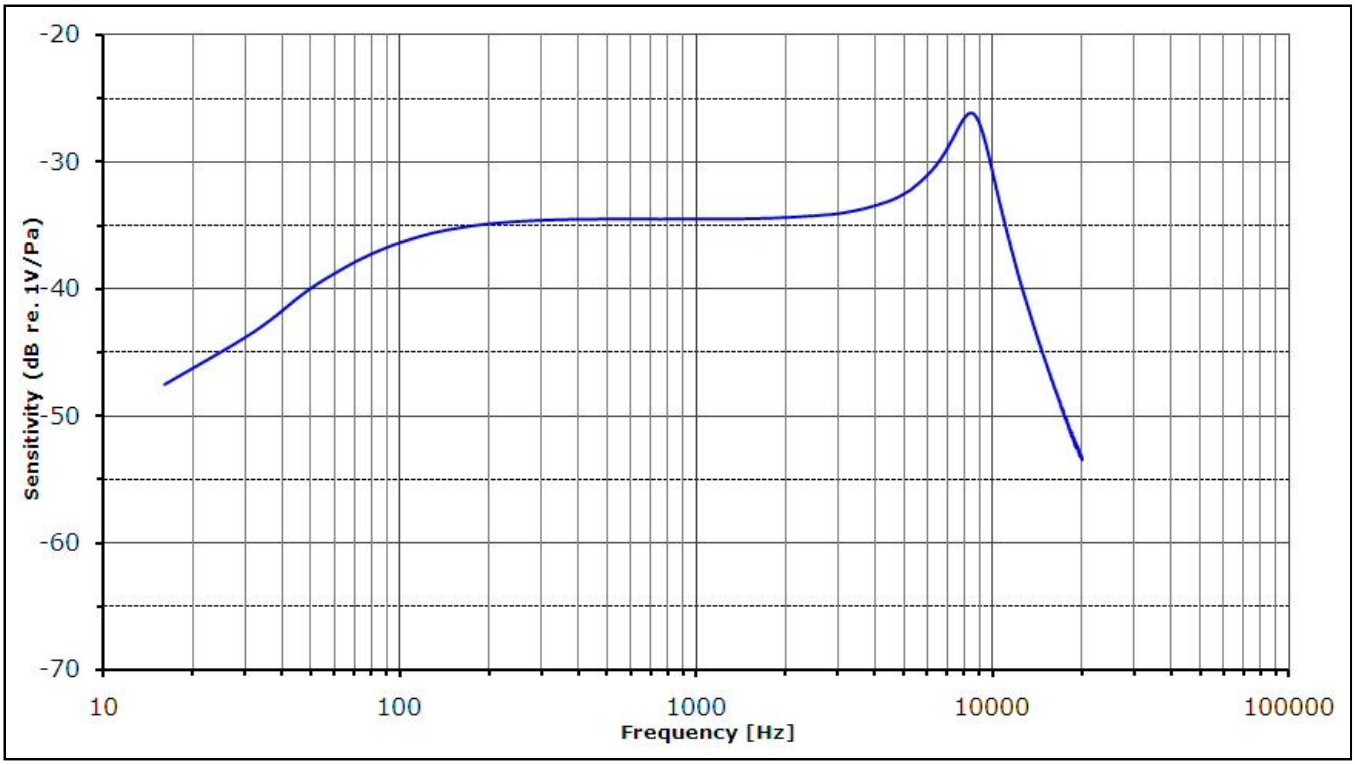
Sonion reserves the right to make changes at any time to improve reliability, function or design, in order to provide the best product possible.

Specification

All parameters are specified at 0.9 V and 1 MOhm // <200pF load impedance, AC-coupled with 1µF, unless specified otherwise. Environmental conditions: 23 °C (73.4F), 50% RH.

Parameters		Min	Typ	Max	Unit	Comments
Sensitivity *	@ 75 Hz	-5	-3	-1	dB	re. 1 kHz value
	@ 1 kHz	-37.5	-34.5	-31.5	dB	re. 1V per Pascal
	@ 8.5 kHz	5.5	8.5	11.5	dB	re. 1 kHz value
Peak frequency			8.5		kHz	
Equivalent noise (A-weighted)			26	28.5	dB SPL	
Power supply feedthrough			-12	-10	dB	
Battery voltage range		0.8	0.9	5	VDC	
Battery drain		10	17	30	µA	
Output impedance **		3	4.5	6	kOhm	
Input-referred vibration sensitivity			65		dB SPL/g	1 kHz ref. acc. in axial direction
Humidity coefficient of sensitivity			0.02		dB/%RH	
Input-referred EMI noise	0.8-0.96 GHz			30	dB SPL	according SMI 255, E=75 V/m
	1.8-2.0 GHz			30	dB SPL	according SMI 255, E=75 V/m
	1.4-2.0 GHz			30	dB SPL	according SMI 255, E=50 V/m
Operating temperature range		-17	23	63	°C	
Storage temperature range		-40		63	°C	
ESD protection level: Class 2 according to MIL-STD-750D, test method 1020,2. Apply protection in accordance with IEC 61340-5-1 and 61340-5-2.						
* 1 kHz sensitivity at 1.3 VDC supply: -34 dB re. 1V/Pa typ.						
** Output impedance at 1.3 VDC supply: 3 kOhm typ.						

Typical response curve



Typical 1/3 octave equivalent noise